



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,295	09/13/2005	Artur Lachowicz	80385(47762)	5592
21874 7590 03/05/2009 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205				
EXAMINER HEINER, LIAM J				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
03/05/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/516,295

Applicant(s)

LACHOWICZ ET AL.

Examiner

Liam J. Heincer

Art Unit

1796

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noomen et al. (US Pat. 5,219,958) in view of Becker et al. (US Pat. 5,677,379). Considering Claim 1: Noomen et al. teaches a thermosetting/curable coating one component composition (1:13-17) comprising a compound having multiple activated unsaturated groups (2:30-3:21); a compound having at least two acetoacetate groups (4:49-56); a basic catalyst (5:15-32); and a carboxylic acid that is preferably formic, acetic or propionic acid (5:38-6:4).

Noomen et al. does not teach the catalyst as being a tertiary alkyl phosphine. However, Becker et al. teaches using an alkyl phosphane/phosphine such as tributyl phosphane as a catalyst for a Michael reaction (13:51-67) between an activated unsaturated group and an activated hydrogen (1:45-2:9). Noomen et al. and Becker et al. are analogous art as they are concerned with the same field of endeavor, namely

Michael addition curable compositions. It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the alkyl phosphane catalyst of Becker et al. in the composition of Noomen et al., and the motivation to do so would have been, as Becker et al. suggests, alkyl phosphanes are functionally equivalent to the amine catalysts of Noomen et al. in Michael addition curable compositions (13:51-67).

Noomen et al. does not teach adding the acid before the catalyst. However, the selection of any order of mixing ingredients is *prima facie* obvious. *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930). See MPEP § 2144.04. As there has been no showing of new or unexpected results, it would have been obvious to a person having ordinary skill in the art at the time of invention to have added the acid prior to the catalyst.

Considering Claim 2: Noomen et al. teaches the ratio of unsaturated groups to activated hydrogens as being from 1:4 to 4:1 (5:3-13).

Considering Claim 3: Noomen et al. teaches adding the catalyst in an amount of 0.05 to 3.0 weight percent (5:32-37) with 0.3 weight percent being used in an example (Example 1).

Considering Claim 4: Noomen et al. teaches the acid as being present in an amount of 0.22 weight percent (Example 1).

Considering Claims 7-10: Noomen et al. teaches the composition as being gelled/crosslinked (9:1-21).

Response to Arguments

Applicant's arguments filed December 30, 2008 have been fully considered but they are not persuasive, because:

A) In response to applicant's argument that the references do not teach avoiding the problems caused by use of a weak catalyst base, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter.

1985). The applicant cites the original specification to show that it is known that strong bases cause poor quality laquers (4:17-5:9). However, the references cited in this section of the original specification are not sufficient to establish unexpected results when using the claimed catalyst.

Brindöpke et al. (US Pat. 4,871,822) does not in fact teach that the catalysts of Noomen et al. result in bad solubility and considerable yellowing. Rather, Brindöpke et al. teaches that alkali metal catalysts have these undesirable qualities (1:67-2:3). The catalysts disclosed in Noomen et al. (5:15-31) are actually part of the invention of Brindöpke et al. (16:20-24) that results in a reduction of these undesirable qualities (2:8-14).

The Journal of Coatings Technology, vol. 61 No. 770, 1989 is relied upon to show that the catalysts result in poor hydrolytic stability. While the article does teach that hydrolytic stability was an issue, a low temperature baking step was used to eliminate the problem (pg. 89). As Noomen et al. teaches a baking step to remove volatile acids (5:38-57, Examples 11-13), one would assume that this baking step would also improve the hydrolytic stability, based on the above teaching.

Finally, no experimental evidence has been provided to show the non-equivalence of the catalyst of Becker and the catalyst of Noomen. "It is well settled that unexpected results must be established by factual evidence." See MPEP § 716.01(c). The original specification contains no comparative examples of any kind. Therefore, the properties of the composition using the claimed catalyst cannot be assessed in comparison with other known catalysts for Michaels additions.

B) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The fact that Becker et al. does not teach a one component system is not sufficient to disqualify the rejection. Noomen et al. teaches that a one component system using Michaels reactants can be created by using a blocked catalyst system (5:16-6:26). As Noomen et al. does not rely on any specific catalyst to create the one

component system, but rather on the carboxylic acids, a person having ordinary skill in the art at the time of invention would not limit their choice of catalysts to ones used in other one component systems.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

LJH
February 25, 2009